

# Cardiac Ready Communities



**NORTH DAKOTA**  
DEPARTMENT *of* HEALTH





# Where is your community?

# Cardiac Ready Community

What do you think it means?



- Population-Approx. 400
- North Dakota Cardiac Ready Community Pilot Project

# **Powers Lake, ND**

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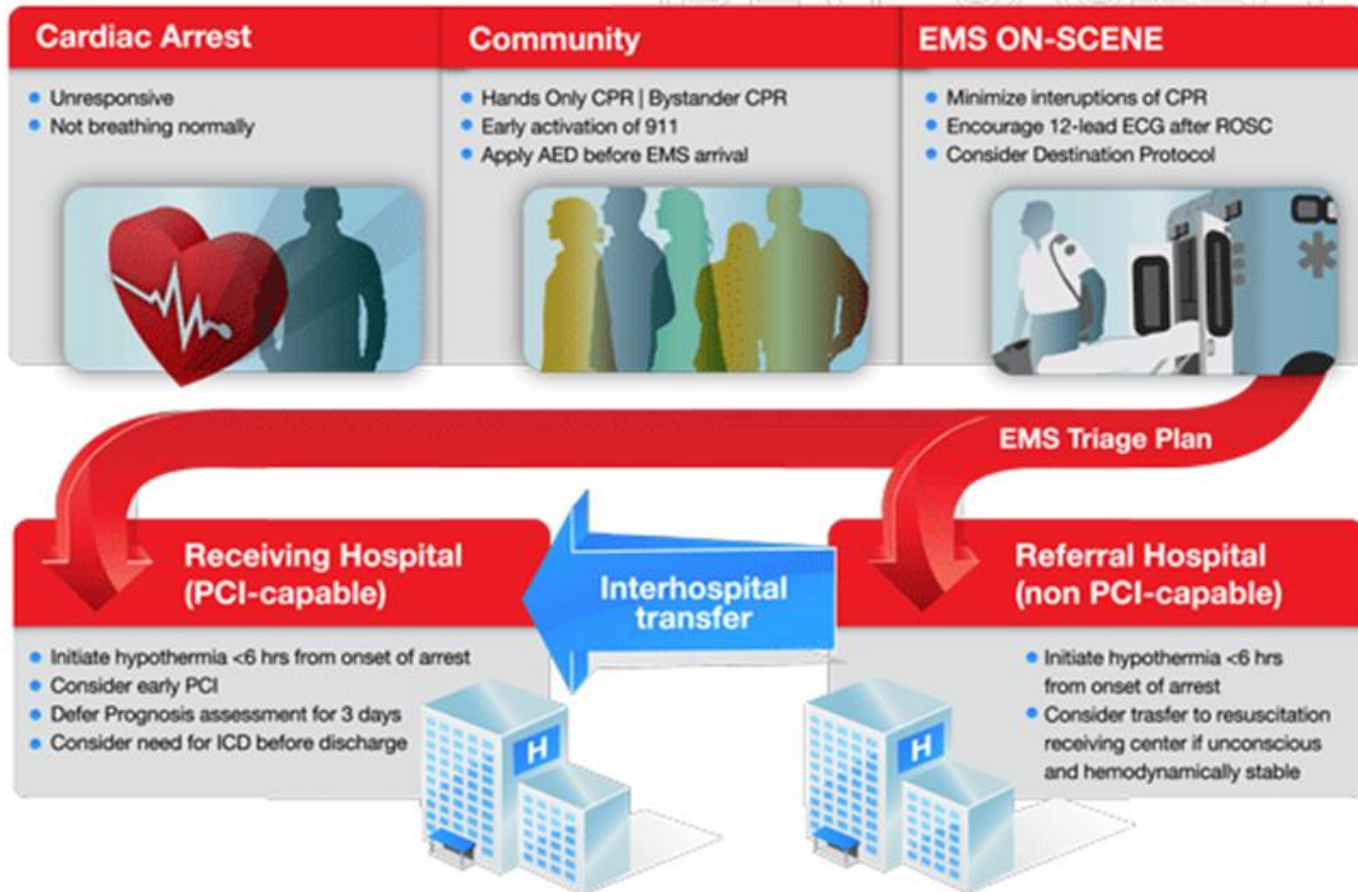
- This is a Cardiac Ready **Communities** project
- The Community must be engaged with the links of the Chain of Cardiac Survival
- Technology alone will not save people, people who are educated and aware will!
- For every minute without life-saving CPR and defibrillation, chances of survival decrease 7-10%
- 70% of Americans may feel helpless to act because they don't know CPR or their training has significantly lapse.





MISSION:  
LIFELINE

# STEMI & CARDIAC RESUSCITATION IDEAL SYSTEM



## Five Links in the Chain of Survival

- Immediate recognition of cardiac arrest and activation of the emergency response system
- Early CPR with an emphasis on high quality chest compressions
- Rapid defibrillation
- Effective basic life support with advanced life support intercept
- Integrated post-cardiac arrest care



# AHA Chain of Survival

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- Community Leadership
- On-Going Community Awareness Campaign
- Community Blood Pressure Control Program
- CPR & AED Training
- Public Access AED Locations
- EMD Dispatching Program
- EMS Services
- Hospital Services
- Cardiac Ready Community Program Evaluation

# Criteria

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- Do major public gathering places have AEDs available and staff trained in CPR?
- EMS Response time. Any frequently prolonged areas?
- Where is the nearest hospital?
- Percentage of population trained in CPR
- Does an organization offer preventative screenings such as blood pressure screenings?
- Survival rate in the community from cardiac arrest?

# Analyze the Community's Situation

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- City Council
- EMS, Fire, & Police
- Nurses
- Hospitals/Clinics
- Elected Officials
- Dispatch or Public Safety Answering Points (PSAPs)
- CPR Instructors
- Chamber of Commerce
- Public High School Administration
- Major Employers
- Cardiac Arrest Survivors



# Build Support Team

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- Each community has unique needs and challenges
- Discuss community's goals and the criteria the community needs to achieve
- Solicit ideas for implementation



# Information Meeting

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- Public Education
- Use ads, newspaper, radio, television, church bulletin, flyers
- Community effort



**Immediate recognition of  
cardiac arrest and activation of  
emergency response system**

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- Available free through ND Dept. of Health and the American Heart Association
- Be Creative!
- Focus attention on areas where mass amounts of the population will see the message.

# **Public Education Materials**

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- Offer variety of CPR class levels
- Educate public on what automated CPR devices are (example: LUCAS)



**Early CPR with emphasis on  
high quality chest  
compressions**

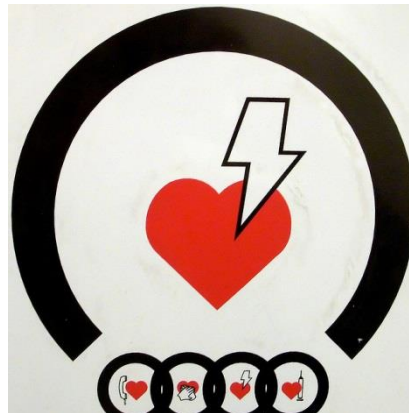
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- Make sure the middle and high school students are trained
- Reimbursement is available –Senate Bill 2013
- School districts and nonpublic schools can receive reimbursement for providing CPR and AED training to high school students during the 2015-2016 and 2016-2017 school years
- The reallocation of funds eliminated the requirement for any in-kind or match funds
- Provides great benefit and will increase number of CPR-ready individuals in our communities & a great way to expose students to the health care profession
- Now part of the curriculum in North Dakota for Physical Education
- See [www.nd.gov/dpi](http://www.nd.gov/dpi) for more information

# **CPR in High Schools**

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- AED Placement in public places & high traffic areas
- Consider placement in churches
- Community must map location of AEDs
- Law Enforcement, Fire, and Highway Patrol should have AEDs
- Educate public on how to use them!



# Rapid defibrillation

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- Transport plan should include intercept with advanced life support
- Protocols for care of cardiac arrest



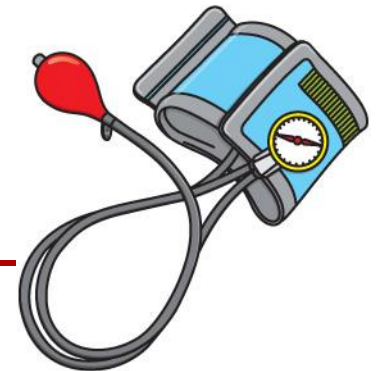
# Effective advanced life support

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- Hypertension is the leading risk factor for a cardiac or stroke event
- Educate the public on importance of knowing their numbers through **checking** blood pressure, lifestyle **changes** with physical activity and healthy food choices, and **control** through working with their healthcare provider

# Community Blood Pressure Program

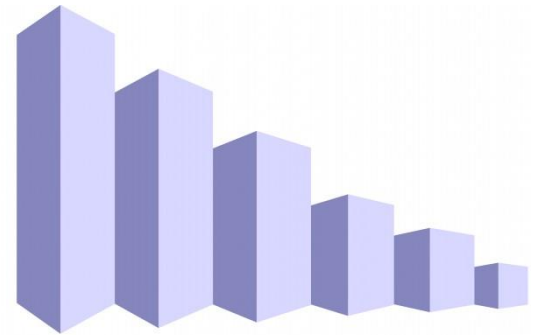
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- Community works to fulfill criteria
- Keep record of events hosted, number of people participated, cardiac survival rates, and other data
- Need to evaluate effectiveness of the efforts
- Discuss what is working & what isn't

# **Implement & Track Changes**

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- Once a community fulfills the criteria a member of the ND Dept of Health assesses if the criteria has been met and designates the community as a Cardiac Ready Community or offers areas of improvement before designation will be given.
- Designation valid 3 years



# Designation

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- Link MS, Atkins DL, Passman RS, Halperin HR, Samson RA, White RD, Cudnik MT, Berg MD, Kudenchuk PJ, Kerber RE. Part 6: electrical therapies: automated external defibrillators, defibrillation, cardioversion, and pacing: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation*. 2010;122(suppl 3):S706 –S719
- Peberdy, M.A., Callaway, C.W., Neumar, R.W., Geocadin, R.G., Zimmerman, J.L., Donnino, M., Gabrielli, A., Silvers, S.M., Zaritsky, A.L., Merchant, R., Vanden Hoek, T.L., Kronik, S.L. (2010). 2010 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*, 122, p. 5768-5786.
- [http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStrokeNews/Heart-Attack-or-Sudden-Cardiac-Arrest-How-Are-They-Different\\_UCM\\_440804\\_Article.jsp](http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStrokeNews/Heart-Attack-or-Sudden-Cardiac-Arrest-How-Are-They-Different_UCM_440804_Article.jsp)

# References

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